AMENDMENTS TO THE CLAIMS

1. (Original) An appliance network having format-neutral multimedia communication, said network comprising:

two or more appliances connected to said appliance network, each of said two or more appliances having interface information defining its multimedia capabilities;

a communication protocol for communicating said interface information over said appliance network, wherein each of said two or more appliances comprises:

an application information base (AIB) for storing interface information for each of said two or more appliances connected to said appliance network;

a network interface for communicating multimedia data over said appliance network; and

a multimedia manager for translating said multimedia data into a compatible format.

2. (Original) The appliance network of claim 1 wherein said communication protocol prompts each of said two or more appliances to communicate said interface information upon connecting to said appliance network.

3. (Original) The appliance network of claim 1 further comprising:

a communication configuration, said communication configuration comprising at least one of:

a point-to-point configuration;

a point-to-multipoint configuration;

a ring configuration; and

a spoke configuration.

4. (Original) The appliance network of claim 3 wherein said communication configuration is selected by one of said two or more appliances initiating communication of said multimedia data.

5. (Original) The appliance network of claim 1 wherein said communication protocol provides for each of said two or more appliances to communicate all of its interface

information to each other of said two or more appliances connected to said appliance network when said each of said two or more appliances initially connects to said appliance network.

6. (Original) The appliance network of claim 1 wherein said multimedia manager comprises:

at least one coding-decoding application for converting a format of received multimedia data into said compatible format responsive to said interface information;

a gamut mapping application for translating said multimedia data onto a local user interface; and

a resolution application for regulating a resolution of said multimedia data into a compatible resolution for said local user interface.

7. (Original) The appliance network of claim 1 wherein said multimedia data is translated into said compatible format for each of said two or more appliances receiving said multimedia data by one of said two or more appliances transmitting said multimedia data over said appliance network.

8. (Original) The appliance network of claim 1 wherein said multimedia data is translated into said compatible format for each of said two or more appliances receiving said multimedia data by one of:

one of said two or more appliances transmitting said multimedia data over said appliance network; and

said each of said two or more appliances receiving said multimedia data;

responsive to said interface information.

9. (Original) A method for dynamically reformatting multimedia information in a network of appliances comprising the steps of:

obtaining interface settings for each of said appliances;

receiving said multimedia information from one of said appliances at a local appliance;

decoding a format of said received multimedia information according to said interface settings;

translating color data of said multimedia information into a color scheme of said local

appliance; and

adjusting a resolution of said multimedia information into a resolution scheme of said local appliance.

10. (Original) The method of claim 9 wherein said translating step comprises the steps of:

reading a point from said color data of said multimedia information; and

looking up a translation point in a table of color points within said color scheme.

11. (Original) The method of claim 10 further comprising the steps of:

substituting said translation point into said multimedia information when said translation point is found in said table; and

interpolating an estimated color point corresponding to said point from said multimedia information.

12. (Original) The method of claim 9 wherein said translating step comprises the step of:

calculating a translation point using a gamut mapping formula.

13. (Original) The method of claim 9 wherein said adjusting step comprises the steps of:

down-sampling said resolution of said multimedia information when said resolution is higher than said resolution scheme of said local appliance; and

up-sampling said resolution of said multimedia information when said resolution is lower than said resolution scheme of said local appliance.

14. (Original) The method of claim 13 further comprising the step of:

smoothing said multimedia information.

15. (Original) The method of claim 9 further comprising the steps of:

adjusting said resolution scheme of said local appliance into a remote resolution scheme;

translating said color scheme of said local appliance into a remote color gamut space;

coding said multimedia information into a remote visual format according to said

interface settings; and

transmitting said multimedia information from said local appliance to another one of said appliances on said network.

16. (Original) The method of claim 9 further comprising the steps of:

copying said received multimedia information; and

transmitting said copied multimedia information to one of said appliances on said network.

17. (Original) A dynamic reformatting engine for processing image data transmitted on an appliance network:

code for managing communication from an appliance on said appliance network;

a memory for storing appliance compatibility information received from each of said appliances on said appliance network;

code for interpreting at least one format of said image data responsive to said appliance compatibility information;

code for mapping points from one color gamut space to another color gamut space; and

code for adjusting a resolution of said image data into another resolution.

18. (Original) The dynamic reformatting engine of claim 17 further comprising:

code for smoothing said image data after said image data manipulated by said appliance.

19. (Original) The dynamic reformatting engine of claim 17 further comprising:

code for processing said image data at one of said appliances for display on another of said appliances according to appliance compatibility information corresponding to said another of said appliances.

20. (Original) The dynamic reformatting engine of claim 17 further comprising:

a signal divider for making a copy of said image data; and

code for communicating said copy of said image data to another of said appliances without any further processing to said copy.

21. (Original) A network appliance capable of dynamically reformatting visual data communicated across a network of appliances, said network appliance comprising:

an appliance manager for obtaining interface information for each appliance connected to said network of appliances;

an appliance information base for storing said interface information;

at least one codec for transcoding visual data formats responsive in part to said interface information;

a conversion manager for mapping said visual data onto a local user interface of said network appliance; and

a resolution manager for adjusting said visual data to a resolution of said local user interface.

22. (Original) The network appliance of claim 21 further comprising:

a transmission manager for managing the transcoding of visual data transmitted from said network appliance into a format compatible with another appliance connected to said network of appliances responsive to said interface information.

23. (Original) The network appliance of claim 21 further comprising:

a reception manager for managing the transcoding of visual data received from another appliance on said network of appliances into a format compatible with said local user interface.

24. (Original) The network appliance of claim 21 wherein said resolution manager includes:

a down-sampler for reducing said resolution of said visual data when said resolution of said visual data exceeds said resolution of said local user interface; and

an up-sampler for increasing said resolution of said visual data when said resolution of said visual data is lower than said resolution of said local interface.

25. (Original) The network appliance of claim 24 wherein said resolution manager further includes:

a smoothing algorithm for blending said visual data.

26. (Original) The network appliance of claim 21 further comprising:

a signal splitter for passing a non-reformatted copy of said visual data to another appliance on said network of appliances .

27. (Original) The network appliance of claim 26 further comprising:

a store and forward device for storing said non-reformatted copy of said visual data and forwarding said data to said another appliance.

28. (Original) The network appliance of claim 21 wherein said conversion manager includes:

a look up table for mapping a remote gamut point of said communicated visual data into a local gamut point within a local gamut space of said network appliance; and

an interpolator for interpolating said remote gamut point into said local gamut space when a location of said local gamut point is not disposed in said look up table.

29. (Original) A method for reformatting media information in a networked appliance comprising the steps of:

receiving said media information at a network interface;

decoding a format of said received media information according to stored user interface information;

mapping color points from said media information onto a color system used by said networked appliance; and

adapting a resolution of said media information according to a user interface of said networked appliance.

30. (Original) The method of claim 29 further comprising:

transmitting user interface information for said networked appliance when said networked appliance connects to a network.

31. (Original) The method of claim 29 further comprising:

receiving user interface information for all appliances connecting to a network on which said networked appliance is connected; and

storing said received user interface information.

32. (Original) The method of claim 29 further comprising:

smoothing said received media information prior to displaying said received media information on said user interface of said networked appliance.

33. (Original) The method of claim 29 wherein said mapping step comprises the steps of:

reading each of said color points of said media information;

looking up a translation color point that corresponds to said read color point;

substituting said translation color point into said media information when said translation color point is found; and

interpolating an estimated translation color point into said media information when said translation color point is not found.

34. (Original) The method of claim 33 wherein said looking up step comprises:

looking up said translation color point in a look-up table.

35. (Original) The method of claim 29 wherein said adapting step comprises the steps of:

determining when said resolution of said media information is not compatible with said user interface of said networked appliance;

down-sampling said resolution when said resolution is higher than said user interface; and

up-sampling said resolution when said resolution is lower than said user interface.

36. (Original) The method of claim 31 further comprising the steps of:

adjusting said resolution of said media information according to said stored interface information for another appliance connected to said network;

translating said color system of said networked appliance according to said stored interface information for said another appliance connected to said network;

coding said media information according to said stored interface information for said another appliance connected to said network; and

transmitting said multimedia information from said networked appliance to said another appliance connected to said network.

37. (Original) The method of claim 29 further comprising the steps of:

copying said received media information; and

transmitting said copied media information through said network interface.